CLAIMS

1. Method for manufacturing a product having various diameters from a workpiece (1), such as a metal cylinder or plate, in which the workpiece (1) is clamped down in a clamping device (10, 34), the workpiece (1) and a first tool (3A) are rotated about an axis of rotation (2) relative to each other, the workpiece (1) is deformed by means of said first tool (3A) by placing the tool (3A) into contact with the workpiece (1) and moving the workpiece (1) and/or the tool (3A) in a direction along said axis of rotation (2), **characterized in that** at least a second tool (3B) is placed into contact with the workpiece (1) at a position behind the first tool (3A), and in that the workpiece (1) is also deformed by means of said second tool (3B).

2. Method according to claim 1, wherein at least a third tool (3B) is placed into contact with the workpiece (1) at a position behind the second tool (3B).

3. Method according to claim 1 or 2, wherein the tools (3) each comprise two or more forming rollers, between which the workpiece (1) is retained while being worked.

4. Method according to any one of the preceding claims, wherein the workpiece (1) is formed into a finished or semifinished product in only one working cycle.

5. Method according to any one of the preceding claims, wherein a tensile force is exerted on the workpiece (1).

6. Method according to claim 5, wherein said tensile force is varied during said working.

7. Method according to any one of the preceding claims, wherein at least one of the tools is adjusted in radial direction during said working.

8. Method according to any one of the preceding claims, wherein the workpiece (1) has an open end, which end is closed by means of the tools (3), preferably in one operation.

9. Method according to any one of the claims 1 - 4, wherein the workpiece (1) is a plate-shaped body, and wherein the central axis of the tools is pivoted relative to the axis of rotation (2).

10. Method according to claim 9, wherein the tools (3) are moved relative to each other during said working.

11. Method according to claim 9 or 10, wherein the edge of the workpiece (1) is supported at least during part of the operation.

12. Forming machine suitable for manufacturing products having various diameters, which forming machine comprises at least a clamping device (10, 34) for clamping down a workpiece (1), such as a metal cylinder or plate, a first tool (3A), which can be placed into contact with the workpiece (1) while being worked, means for rotating the workpiece (1) and the tool (3A) about an axis of rotation (2) relative to each other, and means for moving the workpiece (1) and/or the tool (3A) in a direction along said axis of rotation (2), **characterized in that** the forming machine furthermore comprises at least a second tool (3B) disposed behind said first tool (3A), which can be placed into contact with the workpiece (1).

13. Forming machine according to claim 12, comprising at least a third tool (3C) disposed behind said second tool (3B).

14. Forming machine according to any one of the claims 12 or 13, wherein the tools (3) each comprise two or more forming rollers, between which the workpiece (1) can be retained.

15. Forming machine according to any one of the claims 12 - 14, wherein the tools (3) can be moved relative to each other during the working.

16. Forming machine according to any one of the claims 12 - 14, wherein two or more forming rollers associated with different tools (3) are mounted on a common holder (38).

17. Forming machine according to claim 16, wherein said holder (38) is mounted in or on the forming machine in such manner as to be capable of rotation about an axis (39) which crosses said axis of rotation (2), and/or radial translation.

18. Forming machine according to any one of the claims 12 - 17, comprising a mandrel (5) or bush to be placed in or around, respectively, an unworked part of the workpiece (1), and by means of which a tensile force can be exerted on the workpiece.